# **Technical Information**

## SUNLIT™ EXACT PSO

SunLit Exact PSO is a top quality sheetfed offset inks for 4-colour process printing ideally suited for printing according to ISO 12647:2 ("Process Standard Offset"). It is designed for the use on all types of sheetfed presses including 8, 10 and 12 colour multicolour perfecting machines. Exceptional lithographic stability and excellent dot reproduction. Suitable for publication, commercial and packaging printing.

SunLit Exact PSO is optimised if prints shall comply with ISO 12647:2 (Process Standard Offset, PSO).

SunLit Exact PSO can be printed in-line with water-based coatings or in-line/off-line with oil-based sealers to accelerate the print shop workflow. The application of UV coatings (in-line or off-line) might require the use of a primer. When printing without in-line coating, Sun Chemical does not recommend the use of IR dryers.

PROCESS COLOURS	PRODUCT CODE	LIGHT FASTNESS ISO 12040	ALCOHOL ISO 2836	SOLVENT MIXTURE ISO 2836	ALKALI ISO 2836
SUNLIT EXACT PSO Process Black	EXA46	7	-	-	+
SUNLIT EXACT PSO Process Cyan	EXA25	8	+	+	+
SUNLIT EXACT PSO Process Magenta	EXA27	5	+	+	-
SUNLIT EXACT PSO Process Yellow	EXA26	5	+	+	+
SUNLIT EXACT PSO Cyan G/S	EXA07	8	+	+	+
SUNLIT EXACT PSO Dense Black	EXA24	7	-	-	+

Realising ISO 12647 is appreciated by print buyers and results in higher pressroom efficiency. Sun Chemical has the expertise in offset standardisation and supplies SunLit Exact PSO as the ideal tool.

working for you.





## SUNLIT™ EXACT PSO

### **CHARACTERISTICS**

Excellent dot reproduction
Excellent lithographic stability at all press speeds
Excellent performance on long perfecting presses
Very good mechanical resistance\*

Very good stack capability\* Very fast work and turn\* Good gloss\*

\* Dependent on substrate

#### **ENVIRONMENTAL**

It is Sun Chemical's policy to reduce progressively ecological impacts and resource intensity throughout the life-cycle of their products. When selecting raw materials we follow strictly the EuPIA Raw Material Exclusion List (<a href="www.eupia.com">www.eupia.com</a>) and respect the CONEG regulation on toxic heavy metals. SunLit Exact PSO is vegetable based and complies with EN 71/3 (suitability for toy packaging).

## PRINT STANDARDISATION (ISO 12647:2, PSO)

Some offset printers commenced to realise print standardisation according to ISO 12647:2 in their press-rooms. The entire offset workflow is regulated comprising the incoming picture data, the dot size and shape on the printing plate and the reproduction of the picture on the print. Finally, the colour of the full-tone and the dot gain of the 4 colours are specified. By their choice of pigments and by their precise dot reproduction, SunLit Exact PSO supports the realisation of ISO 12647:2 in an offset pressroom. For achieving best results in compliance with ISO 12647:2 (PSO) use SunLit Exact PSO Cyan G/S EXA07. The intensive Black EXA 24 even exceeds the jetness required by the PSO standards. SunLit Exact PSO complies with industrial standards as ISO 2846:1 (Colour).

Sun Chemical has gained a lot of expertise in print standardisation and is an official partner of FOGRA, which is one of the certifying institutes. Please consult Sun Chemical if support in this matter is needed.

#### **FOUNTAIN SOLUTIONS**

SunLit Exact PSO process inks are compatible with a wide range of fountain solutions. Isopropanol (IPA) reduction or elimination is supported. Sun Chemical recommends the following ideally adapted products:

SunFount 410; suitable for 5-7% IPA in normal water qualities

SunFount 480; suitable for 3-6% IPA, to prevent roller glazing

SunFount 455; suitable for 0-5% IPA, adapted for IPA free printing

The quality of the water and the overall printing conditions have a strong impact on the choice of fountain solution and the level of IPA required. Please consult our technical services for assistance.

### **WATER-BASED OVERPRINT VARNISHES**

Sun Chemical offers a full portfolio of water-based overprint varnishes. The final choice depends on individual press conditions, the substrate used and the expectations on the print regarding visual appearance. The following products are widely used:

SunCoat 2431 gloss coating, suitable for work & turn jobs on paper and board

SunCoat 9265 matt coating, suitable for work & turn jobs on paper and board

SunCoat 9205 primer for in-line UV coating

SunCoat 9206 primer for off-line subsequent UV coating

## **APPLICATION INFORMATION**

SunLit Exact PSO process inks dry by absorption and oxidation. They are duct fresh and supplied ready for use. Addition of oils or tack reducers might affect the well-balanced dot reproduction and shall be avoided.

SunLit Exact PSO is suitable for all types of offset printing plates.

SunLit Exact PSO is not recommended for sensitive food packaging and outdoor posters or for printing on impervious substrates (films, foils).

For further detailed application advice please contact our technical services. A Material Safety Data Sheet is available on request.



Sun Chemical Europe Wexham Springs Framewood Road Slough, SL3 6PJ United Kingdom

Tel + 44 (0)203 139 0000 Fax + 44 (0)203 139 0001 www.sunchemical.com

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